

Exhibit A

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

GARY KOOPMANN, TIMOTHY KIDD and	:	
VICTOR PIRNIK, Individually and on Behalf of	:	No. 15 Civ. 7199 (JMF)
All Others Similarly Situated,	:	
	:	
Plaintiffs,	:	
	:	
v.	:	
	:	
FIAT CHRYSLER AUTOMOBILES N.V.,	:	
FCA US, LLC, SERGIO MARCHIONNE,	:	
SCOTT KUNSELMAN, MICHAEL DAHL,	:	
STEVE MAZURE, and ROBERT E. LEE,	:	
	:	
Defendants.	:	
	:	

Declaration of Paul A. Gompers, Ph.D.
April 5, 2018

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I. Qualifications and Assignment

1. My qualifications, credentials, and compensation are described in the expert report I previously submitted in this matter (Expert Report of Paul A. Gompers, Ph.D., filed on February 13, 2018; “Gompers Report”).¹ A list of my expert testimony in the last four years is included as Appendix A to this declaration, including my recent testimony since submitting the Gompers Report. I have been asked by counsel for Fiat Chrysler Automobiles N.V. (“Fiat Chrysler”²) to comment on the Expert Rebuttal Report of Zachary Nye, Ph.D., filed on March 13, 2018 (“Nye Rebuttal Report”) specifically regarding (i) Dr. Nye’s “proposed” damages model, and (ii) Dr. Nye’s statements about the economic conclusions one can draw based on statistical significance.
2. A list of documents, data, and other information that I have considered in forming the opinions set forth in this report is attached hereto as Appendix B. I reserve the right to revise my opinions in light of my ongoing review of the materials I have considered, as well as additional materials, including data, documents, and deposition or other testimony that may subsequently come to light, or if I am asked to perform further research or analysis.

II. Summary of Opinions

3. My opinions as provided in the Gompers Report are unchanged. As pertains to a damages methodology, Dr. Nye still has not articulated a class-wide damages approach based on the specific facts of the case that accords with Plaintiffs’ theory of liability. His apparent adoption of a constant dollar inflation model in the Nye Rebuttal Report only highlights the shortcomings of his “proposed” damages methodology. In particular, given the specific facts of the case (discussed extensively in the Gompers Report), Dr. Nye’s “proposed” constant dollar inflation model is not capable of measuring only those damages stemming from Plaintiffs’ theory of liability.

4. As to what inferences one can draw based upon an event study, Dr. Nye claims that a statistically insignificant residual stock price return does not provide evidence supporting the null hypothesis of a lack of price impact. This claim is inconsistent with the standards of statistical inference in academic research in financial economics. An economist needs to

¹ Gompers Report, ¶¶ 1–3, 5.

² In this report, where appropriate, “Fiat Chrysler” may also refer to or include subsidiaries of Fiat Chrysler Automobiles N.V.

have *some* objective method for determining which residual stock price returns were affected by material new information versus which residual stock price returns are simply normal random fluctuations (*i.e.*, noise). Testing for statistical significance at the 95% confidence level is the standard approach for objectively measuring cause and effect in the field of financial economics. Therefore, the statistically insignificant residual stock price return that Dr. Nye finds following the announcement of the NHTSA Consent Order is evidence that supports the null hypothesis of a lack of price impact.

III. Dr. Nye’s Apparent Adoption of a Constant Dollar Inflation Model Only Highlights the Shortcomings of His “Proposed” Damages Methodology.

5. As I explained in the Gompers Report, the Expert Report of Zachary Nye, Ph.D. filed on December 21, 2017 (“Nye Initial Report”) failed to provide a class-wide damages methodology that is consistent with Plaintiffs’ theory of liability and the facts in this case.³ In the Nye Rebuttal Report, Dr. Nye provides additional details regarding his “proposed” damages framework which have only strengthened my critiques.⁴ The Nye Rebuttal Report also attempts to obfuscate the issue by mischaracterizing my critiques, effectively suggesting that I am tasking Dr. Nye with performing a loss causation analysis and/or calculating damages. Those are red herrings—to be clear, my point is simply that the Nye Initial Report has not articulated a damages methodology capable of measuring only those damages stemming from Plaintiffs’ theory of liability. The Nye Rebuttal Report has still not articulated any such methodology.

6. The Nye Rebuttal Report describes Plaintiffs’ theories of liability regarding safety compliance and emissions compliance.^{5,6} Correspondingly, Dr. Nye provides additional

³ Gompers Report, ¶ 54. See also Gompers Report, ¶¶ 59–88 for extensive discussion of the case-specific issues that Dr. Nye’s boilerplate approach is incapable of addressing.

⁴ In the Gompers Report, I used a constant dollar inflation band model to illustrate the challenges of developing a methodology to calculate damages that is consistent with Plaintiffs’ theory of liability and the facts of this case. As discussed in this section, Dr. Nye provides additional details in the Nye Rebuttal Report and it appears that he adopts the use of a constant dollar inflation band model to calculate damages in this matter.

⁵ Nye Rebuttal Report, ¶ 50.

⁶ The Nye Rebuttal Report also states that “on October 10, 2014, just prior to the start of the Class Period, Fiat Chrysler assured the market that it was ‘substantially in compliance with the relevant global regulatory requirements affecting our facilities and products,’ and that ‘[w]e constantly monitor such requirements and adjust our operations to remain in compliance,’” such that “the repetition of this statement, as well as other statements that the Company was in compliance with various vehicle safety and emissions regulations, would not have come as a surprise to market participants during the Class Period.” Nye Rebuttal Report, ¶ 5.

information that suggests he believes the full amount of inflation was present in Fiat Chrysler's stock price at the beginning of the Class Period.⁷

7. Furthermore, Dr. Nye appears to have adopted a back-casting damages approach⁸ that is limited to a constant dollar inflation band model where the full amount of inflation would be applied at the beginning of the Class Period.⁹ As explained in the Gompers Report, a constant dollar inflation band model is not universally applicable to all cases, and requires that (i) the but-for disclosures would have occurred before or at the beginning of the Class Period, (ii) the informational content of the but-for disclosures would have been similar to that of the alleged corrective disclosures, and (iii) the price impacts of the but-for disclosures and the alleged corrective disclosures with similar informational content would have been identical even though they would have been made at different times and possibly in different economic environments.¹⁰ In other words, Plaintiffs will have to articulate a "course of misconduct" that not only was known or knowable at the beginning of the Class Period, but also corresponded to a but-for disclosure that would have been similar to the informational content of the alleged corrective disclosures and would have had the same price impact as the alleged corrective disclosures.

8. As I further explained in the Gompers Report, Dr. Nye failed to show that his generic "proposed" damages methodology is consistent with Plaintiffs' theory of liability and the facts of this case.¹¹ For example, Dr. Nye has not specified why a price decline following the NHTSA Consent Order is the appropriate measure of inflation at the beginning of the Class Period when the \$105 million fine imposed by NHTSA related to certain recalls that were initiated *after* the beginning of the Class Period.¹²

⁷ Nye Rebuttal Report, ¶¶ 50–51. The period October 13, 2014 through May 22, 2017 represents the class period ("Class Period") defined in the Fourth Amended Complaint for Violations of the Federal Securities Laws, *Gary Koopmann, Timothy Kidd and Victor Purnik, Individually and on Behalf of All Others Similarly Situated v. Fiat Chrysler Automobiles N.V., FCA US LLC, Sergio Marchionne, Scott Kunselman, Michael Dahl, Steve Mazure, and Robert E. Lee*, Civ. Action No:15-cv-07199-JMF (S.D.N.Y. August 24, 2017) ("Fourth Amended Complaint"), ¶ 1.

⁸ Dr. Nye states that using the residual returns following the alleged corrective disclosures is a "natural starting point" to calculate inflation during the Class Period. Nye Rebuttal Report, ¶ 48.

⁹ "[A] damages methodology that can be commonly applied to all Class members involves measuring the abnormal returns in response to the alleged corrective disclosures and/or risk materialization events, adjusting for any confounding news, and then applying the **constant-dollar method** to calculate the amount of inflation in Fiat Chrysler stock throughout the Class Period." Nye Rebuttal Report, ¶ 49, emphasis added. Dr. Nye also appears to commit to a constant dollar inflation band by citing *Waggoner v. Barclays PLC* where he used this methodology. Nye Rebuttal Report, ¶ 49.

¹⁰ Gompers Report, ¶ 47.

¹¹ Gompers Report, ¶ 54. See also Gompers Report, ¶¶ 59–88.

¹² Gompers Report, ¶¶ 59–61.

9. In the Nye Rebuttal Report, Dr. Nye continues to avoid engaging with case-specific complexities and assessing whether his generic “proposed” damages methodology fits this case.¹³ Instead, he merely mischaracterizes my critiques from the Gompers Report:

- a. Citing the *Waggoner v. Barclays PLC* decision, Dr. Nye states that *Comcast* does not require the discussion of damages at the class certification stage to be as “precise” as Defendants claim.¹⁴ However, precision (or lack thereof) is not the salient issue at all, and I never suggested Dr. Nye should offer exact calculations (or indeed any calculations) at this point. My critique was merely that Dr. Nye failed to articulate a damages methodology tailored to the facts and circumstances of Plaintiffs’ liability theory in this case. As stated in the Gompers Report, the task for Plaintiffs at this stage, as I understand it, “is not to calculate damages but to demonstrate that **it is possible to** calculate damages (on a class-wide basis) in a way that is consistent with Plaintiffs’ theory of liability and the facts in this case.”¹⁵
- b. Dr. Nye also states that “all of Dr. Gompers’ criticisms involve loss causation and damages issues that are necessarily common among all Class members.”¹⁶ Dr. Nye misses the point here. My critique in the Gompers Report is not that Dr. Nye failed to show that there is a common methodology for calculating damages, but that Dr. Nye has not demonstrated that he can develop a damages methodology that is consistent with Plaintiffs’ theory of liability and the facts of this case.
- c. Dr. Nye also suggests that the Gompers Report claims that Plaintiffs “must submit proof analyzing stock price movements ‘to isolate losses that are associated with the correction of only the specific alleged misstatements and omissions’” at this stage of the case.¹⁷ Again, this is a misleading red herring. The Gompers Report merely emphasized that Dr. Nye has not explained how he would isolate the effect of confounding information unrelated to the

¹³ Although Dr. Nye states that it is Defendants’ burden to show lack of price impact, I understand that it is Plaintiffs’ burden to demonstrate at the class certification stage that there is a methodology for calculating damages that is consistent with the facts of the case and Plaintiffs’ theory of liability.

¹⁴ Nye Rebuttal Report, ¶ 53.

¹⁵ Gompers Report, ¶ 50, emphasis added.

¹⁶ Nye Rebuttal Report, ¶ 54.

¹⁷ Nye Rebuttal Report, ¶ 53.

allegations. Because Dr. Nye’s “proposed” approach to measuring inflation is based on the residual stock price returns on the alleged corrective disclosures, confounding information released on any of these days could overstate damages. Thus, his “proposed” methodology would need some means to isolate and remove the effect of confounding information, yet Dr. Nye remains silent on what that means is. Absent a more complete explanation of his “proposed” approach, one cannot be sure his “proposed” methodology would not overstate inflation, and therefore damages.

- d. Finally, Dr. Nye states that the Gompers Report’s critique that Plaintiffs must establish “a proper economic but-for world” requires an assessment of loss causation, which is not required at the class certification stage.¹⁸ From an economic perspective, to develop the contours of a but-for world, it is not necessary to analyze whether the alleged corrective disclosures are indeed corrective nor to opine on whether they affected the stock price. In other words, one need not embark on an assessment of loss causation at this point. But it is necessary to conduct some analysis of the alleged misrepresentations and the facts in the case (e.g., whether the informational content of the alleged corrective disclosures was known or knowable at the beginning of the Class Period) to provide a proper economic damages methodology that is consistent with the alleged misrepresentations and case-specific facts. Dr. Nye’s generic “proposed” damages approach may be suitable for some cases; my point is that he has not assessed whether it is suitable for *this* case. For the many reasons described in the Gompers Report, it is not.

IV. From an Economic Perspective, an Objective Method Is Necessary to Determine Whether Residual Stock Price Returns Were Affected by Material New Information.

- 10. A financial economist needs *some* objective method for determining which residual stock price returns were affected by material new information, versus which residual stock price returns are merely consistent with normal random fluctuations. Testing for statistical significance is the standard approach for objectively measuring cause and effect in the field

¹⁸ Nye Rebuttal Report, ¶ 53.

of financial economics.¹⁹ Contrary to claims in the Nye Rebuttal Report, by not rejecting the null hypothesis of no price movement, a researcher cannot say that some piece of news caused the stock price to move. Hence, a researcher analyzing stock price movements finds that this evidence supports the null hypothesis of a lack of price movement.

11. In the Nye Initial Report, Dr. Nye examined whether Fiat Chrysler's stock price was affected by the alleged corrective disclosures by conducting an event study.²⁰ In the Nye Rebuttal Report, Dr. Nye explains how to interpret statistically significant results from his event study: "When testing the null hypothesis of 'no price impact,' a statistically significant result will have a small p-value (*i.e.*, less than 5%, when applying the 95% confidence level), thereby indicating 'the observed data are far from what is expected under the null hypothesis—too far to be readily explained by the operations of chance. That discredits the null hypothesis.'"²¹ As a general matter, I agree that it is appropriate to reject the null hypothesis of a lack of price movement when observing a statistically significant residual stock price return.²² A low p-value (or high confidence level) indicates that it is unlikely to observe a residual stock price return as extreme as, or more extreme than, the observed residual stock price return if the null hypothesis were true.²³

12. However, in his Rebuttal Report, Dr. Nye seems to assert that a statistically *insignificant* residual stock price return is not at all informative for drawing economic inferences: "... [A] failure to find statistical significance at the 95% confidence level does **not** allow a researcher to attribute causation to 'random volatility,' and thereby rule out price impact."²⁴ Insofar as Dr. Nye is suggesting that statistically insignificant residuals are uninformative for statistical inference, I disagree. Dr. Nye's assertion ignores the underlying reason why a residual stock price return is deemed statistically insignificant if its confidence level is less than 95%. Financial economists do not reject the null hypothesis when observing a statistically insignificant residual stock price return because the magnitude of the observed

¹⁹ For example, in the Nye Initial Report, Dr. Nye uses an objective application of the event study under the 95% level of significance to support his opinion of market efficiency. Nye Initial Report, ¶ 69.

²⁰ Nye Initial Report, ¶¶ 79–83.

²¹ Nye Rebuttal Report, ¶ 9.

²² Determining that a residual stock price return is statistically significant does not reveal what may have moved the stock price.

²³ Kaye, David H. and David A. Freedman, "Reference Guide on Statistics" in *Reference Manual on Scientific Evidence*, Third Edition, Washington, D.C.: The National Academies Press, 2011, p. 250.

²⁴ Nye Rebuttal Report, ¶ 7, emphasis in original. Similarly, Dr. Nye claims that "...dismissal of price impact based on a lack of statistical significance at the 95% confidence level is a fundamental statistical error..." Nye Rebuttal Report, ¶ 9.

return is within the “normal” range of residual stock price returns (*i.e.*, it is consistent with “random volatility” in stock prices) assuming the null hypothesis was “true.” Indeed, the fact that a residual stock price return is consistent with residual stock price returns on days with no material new information is evidence that supports the null hypothesis of a lack of price impact.

13. As I explained in deposition, based on my experience as a financial economist, when academic researchers interpret and publish statistically insignificant results, it is typical to draw an inference such as “there is no effect” or “we don’t identify any effect.”²⁵ Specifically, in peer-reviewed academic papers, statistically insignificant results are described to mean “we find no evidence of an effect.”²⁶

14. Furthermore, in stating that a p-value “does not give the chance the null is true,”²⁷ Dr. Nye seemingly attempts to obfuscate the fact that a finding of a statistically insignificant residual stock price return is informative for a threshold determination of whether an event affected the stock price. While it is correct to say that the p-value does not provide the probability that the null hypothesis is true,²⁸ that does not mean an insignificant result is entirely uninformative—at the risk of repetition, such a finding tells one that the observed price movement is consistent with random volatility in stock prices. As explained above, it is typical in published academic research to infer from a statistically insignificant result that there is no identifiable effect.

15. Importantly, in academic research, a financial economist needs to provide some objective methodology for determining which residual stock price returns were affected by material new information and which residual stock price returns were simply consistent with normal, random stock price movements. The standard economic methodology for determining which residual stock price returns were affected by material new information is using a 95% confidence level.²⁹ Therefore, as I explained in deposition, from an economic

²⁵ Deposition of Paul Alan Gompers, Ph.D., March 5, 2018 (“Gompers Deposition”), 48:21–22.

²⁶ Gompers Deposition, 49:4–5.

²⁷ Nye Rebuttal Report, ¶ 9.

²⁸ As described above, a p-value provides the probability of observing a residual stock price return as extreme as, or more extreme than, the observed residual stock price return *assuming* the null hypothesis was true. Therefore, it is inappropriate to use a p-value (or confidence level) to describe the probability that the null was true. Thus, as I explained in my deposition, “[w]hat [various burdens of proof] mean and how they might in some legal interpretation translate into statistics, I have no way of knowing and no way of translating them.” Gompers Deposition, 87:12–15.

²⁹ Gompers Deposition, 42:1–5. As I explained in the Gompers Report, the 95% confidence level is typically used to perform this statistical test. For example, the *Reference Manual on Scientific Evidence* indicates that “[i]n practice, statistical analysts typically use levels of 5% or 1%. The 5% level is the most common in social

perspective and based on peer-reviewed academic research, if a researcher does not find a statistically significant residual stock price return using an event study, it is standard to conclude that the studied event did not affect the stock price.³⁰

16. In further support of this argument, Dr. Nye presents an example in the Nye Rebuttal Report that claims to show how information that is purportedly economically material may not be detected in a statistical test. Specifically, Dr. Nye argues that “[s]urely, had Fiat Chrysler announced that it lost \$250 million in cash by accident, theft, fine, or other means, such an event would have been material to investors and caused an observable price decline in an efficient market. Yet, under Defendants’ myopic rule, which ignores the actual information disclosed and merely focuses on the size of the attendant price reaction, such an event could not possibly have price impact.”^{31, 32}

17. This stylized example is problematic for a few reasons. First, the notion that this information is “surely” material is a normative assessment on Dr. Nye’s part; he has no objective or empirical basis for concluding that such an event is material. This leads directly into the second issue: the point of a statistical test is to provide an objective means for determining what is (or is not) abnormal. Dr. Nye overlooks the fact that the threshold for statistical significance empirically incorporates the normal amount of noise in stock price movements that one must distinguish from actual events affecting the stock price, thereby providing an objective measure for which returns are truly abnormal. If Dr. Nye’s point is merely that a piece of information may be economically material, but not elicit a statistically significant price movement, he is teeing up a complex issue that requires detailed economic analysis, not a mere assertion about what is “surely” material.

18. As noted above, Dr. Nye conducted an event study and used statistical significance tests in the Nye Initial Report to support his opinion about market efficiency and his

science, and an analyst who speaks of significant results without specifying the threshold probably is using this figure.” David H. Kaye and David A. Freedman, “Reference Guide on Statistics” in *Reference Manual on Scientific Evidence*, Third Edition (The National Academies Press, 2011), p. 251. Based on my experience in the context of litigation, expert witnesses typically use the 95% confidence level.

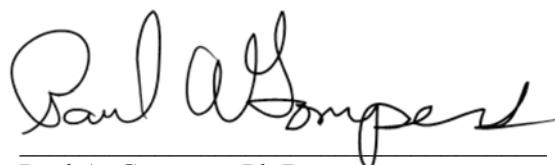
³⁰ Gompers Deposition, 48:9–50:5, 51:14–52:11.

³¹ Nye Rebuttal Report, ¶ 15.

³² Dr. Nye claims that \$250 million would be equivalent to 3.42% per share at a market capitalization of \$7.3 billion for Fiat Chrysler and that, as a result, this event would not meet the 95% confidence level threshold of 3.5% for statistical significance using his event study. Dr. Nye argues that this purportedly material event may not be associated with a statistically significant residual stock price return because it would not exceed 3.5% in magnitude. However, the 3.5% return threshold is also statistically derived from the amount of normal noise in Fiat Chrysler’s stock returns that one must be careful to distinguish from actual events causing the stock price to move.

discussion of price impact.³³ It is interesting that he appeals to statistical inference when it suits him, and seeks to undermine it when it does not. The Nye Rebuttal Report's critiques of single-firm event studies as "low power" tests are in a similar vein, given that Dr. Nye himself developed and used a single-firm event study in this case. Event study researchers face a tradeoff between Type I errors (incorrectly rejecting a null hypothesis) and Type II errors (failing to reject a null hypothesis that is false). While minimizing Type II errors is a concern that researchers must grapple with, this must be weighed against the cost of higher Type I error rates. This concern did not seem important to Dr. Nye in his discussion of his own market efficiency tests. Dr. Nye's arguments regarding the low power of single-firm event studies appear to be an attempt to maintain his price impact claim regarding the NHTSA Consent Order disclosure, which he finds to have a residual stock price return that is not significant at the 95% confidence level. As I noted at deposition, "when an economist speaks of statistical significance, it's generally the case that they mean [the] 95 percent [level]. And as I said, I'm unaware of academic research which is published where things -- where the results are only significant at [the] 90 percent [level]."³⁴ Therefore, the statistically insignificant residual stock price return that Dr. Nye finds following the announcement of the NHTSA Consent Order is evidence that supports the null hypothesis of a lack of price impact.

Executed this 5th day of April 2018



Paul A. Gompers, Ph.D.

³³ Nye Initial Report, ¶¶ 9, 79–83.

³⁴ Gompers Deposition, 42:20–25.

Appendix A

Paul A. Gompers Expert Depositions and Testimony for Prior Four Years

Testimony of Paul A. Gompers in Kenneth J. Novack, as Representative of the Former Shareholders of Retail Convergence, Inc. v. GSI Commerce, Inc., et al., Commonwealth of Massachusetts Superior Court Department of the Trial Court, Civil Action No. SUCV2011-2086-BLS2 (April 24, 2014).

Deposition of Paul A. Gompers in Justin M. Scott v. Putnam, LLC d/b/a Putnam Investments, et al., on behalf of Putnam and Marsh & McLennan, United States District Court for the District of Massachusetts, Case No. 1:11-cv-11082-RWZ (May 6, 2014).

Deposition of Paul A. Gompers in HealthCare Royalty Partners, L.P., v. Shionogi, Inc., on behalf of HealthCare Royalty Partners, L.P., Supreme Court of the State of New York, County of New York, Case No. 650424/2012 (July 9, 2014).

Deposition of Paul A. Gompers in Amazon.com, Inc. & Subsidiaries v. Commission of Internal Revenue, on behalf of Commission of Internal Revenue, United States Tax Court, Tax Court Docket No. 31197-12 (August 20, 2014).

Testimony of Paul A. Gompers in In Re Groupon Inc. Securities Litigation, on behalf of Groupon, Inc., United States District Court for the Northern District of Illinois, Case No. 12-cv-2450 (September 11, 2014).

Deposition of Paul A. Gompers in In Re Marriage of Martha Ehmann Conte and Jean-Pierre L. Conte, on behalf of Martha Ehmann Conte, Superior Court of the State of California, City and County of San Francisco, Case No. FDI-10-773039 (October 30, 2014).

Deposition of Paul A. Gompers in City of Austin Police Retirement System, Individually and on Behalf of All Others Similarly Situated v. Kinross Gold Corporation, et al., on behalf of Kinross Gold Corporation, United States District Court for the Southern District of New York, Case No. 1:12-cv-01203-VEC (November 11, 2014).

Testimony of Paul A. Gompers in In Re Marriage of Martha Ehmann Conte and Jean-Pierre L. Conte, on behalf of Martha Ehmann Conte, Superior Court of the State of California, City and County of San Francisco, Case No. FDI-10-773039 (December 15, 2014).

Testimony of Paul A. Gompers in Amazon.com, Inc. & Subsidiaries v. Commission of Internal Revenue, on behalf of Commission of Internal Revenue, United States Tax Court, Tax Court Docket No. 31197-12 (December 16, 2014).

Deposition of Paul A. Gompers in In Re Dole Food Co, Inc., Stockholder Litigation and In Re Appraisal of Dole Food Company, Inc., Court of Chancery of the State of Delaware, Case Nos. 8703-VCL and 9079-VCL (December 19, 2014).

Deposition of Paul A. Gompers in Dr. David Beach and Christopher Kelly, et al. v. Citigroup Alternative Investments LLC and Citigroup Inc., on behalf of Citigroup Alternative Investments, United States District Court for the Southern District of New York, Case No. 12-cv-7717(GHV) (January 22, 2015).

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Deposition of Paul A. Gompers in Ellen Pao v. Kleiner Perkins Caufield & Byers LLC, et al., on behalf of Kleiner Perkins Caufield & Byers LLC, Superior Court of the State of California, City and County of San Francisco, Case No. CGC-12-520719 (February 9, 2015).

Testimony of Paul A. Gompers in In Re Dole Food Co, Inc., Stockholder Litigation and In Re Appraisal of Dole Food Company, Inc., Court of Chancery of the State of Delaware, Case Nos. 8703-VCL and 9079-VCL (March 2, 2015).

Testimony of Paul A. Gompers in Ellen Pao v. Kleiner Perkins Caufield & Byers LLC, et al., on behalf of Kleiner Perkins Caufield & Byers LLC, Superior Court of the State of California, City and County of San Francisco, Case No. CGC-12-520719 (March 19, 2015).

Deposition of Paul A. Gompers in Carpenters Pension Trust Fund of St. Louis, et al. v. Barclays PLC, et al., on behalf of Barclays PLC, United States District Court for the Southern District of New York, Case No. 1:12-cv-5329-SAS (March 25, 2015).

Deposition of Paul A. Gompers in In Re Goldman Sachs Group, Inc. Securities Litigation, on behalf of The Goldman Sachs Group, Inc., United States District Court for the Southern District of New York, Case No. 1:10-cv-03461-PAC (April 30, 2015).

Deposition of Paul A. Gompers in In Re MiMedx Group, Inc. Securities Litigation, on behalf of MiMedx Group, Inc., United States District Court for the Northern District of Georgia, Atlanta Division, Civil Action No. 1:13-cv-03074-TWT (June 3, 2015).

Deposition of Paul A. Gompers in Carpenters Pension Trust Fund of St. Louis, et al. v. Barclays PLC, et al., on behalf of Barclays PLC, United States District Court for the Southern District of New York, Case No. 1:12-cv-5329-SAS (June 18, 2015).

Testimony of Paul A. Gompers in Carpenters Pension Trust Fund of St. Louis, et al. v. Barclays PLC, et al., on behalf of Barclays PLC, United States District Court for the Southern District of New York, Case No. 1:12-cv-5329-SAS (July 15, 2015).

Deposition of Paul A. Gompers in In Re Goldman Sachs Group, Inc. Securities Litigation, on behalf of The Goldman Sachs Group, Inc., United States District Court for the Southern District of New York, Case No. 1:10-cv-03461-PAC (September 9, 2015).

Deposition of Paul A. Gompers in In Re Marriage of Martha Ehmann Conte and Jean-Pierre L. Conte, on behalf of Martha Ehmann Conte, Superior Court of the State of California, City and County of San Francisco, Case No. FDI-10-773039 (September 25, 2015).

Deposition of Paul A. Gompers in In Re Intercept Pharmaceuticals, Inc. Securities Litigation, on behalf of Intercept Pharmaceuticals, Inc., United States District Court for the Southern District of New York, Civil Action No. 1:14-cv-01123-NRB (October 2, 2015).

Deposition of Paul A. Gompers in In Re NII Holdings, Inc. Securities Litigation, on behalf of NII Holdings, Inc., United States District Court for the Eastern District of Virginia, Alexandria Division, Case No. 1:14-cv-00227-LMB-JFA (October 23, 2015).

Appendix A

Paul A. Gompers

Expert Depositions and Testimony for Prior Four Years

Deposition of Paul A. Gompers in David M. Loritz, et al. v. Exide Technologies, et al., on behalf of the individual defendants, United States District Court for the Central District of California, Master File No. 2:13-cv-02607-SVW-E (November 3, 2015).

Deposition of Paul A. Gompers in Första AP-Fonden and Danske Invest Management A/S, Individually and on Behalf of All Others Similarly Situated v. St. Jude Medical, Inc., et al., on behalf of St. Jude Medical, Inc., United States District Court for the District of Minnesota, Civil No. 12-3070 (JNE/HB) (November 6, 2015).

Deposition of Paul A. Gompers in In Re Petrobras Securities Litigation, on behalf of the individual defendants, United States District Court for the Southern District of New York, Case No. 14-cv-9662 (November 11, 2015).

Testimony of Paul A. Gompers in Andrew Segal, M.D. v. Genitrix, LLC, H. Fisk Johnson, III and Stephen Rose, on behalf of the individual defendants, Commonwealth of Massachusetts Superior Court Department, Civil Action No. 09-776-G (November 18, 2015).

Deposition of Paul A. Gompers in In Re Montage Technology Group Limited Securities Litigation, on behalf of Montage Technology Group Limited, United States District Court for the Northern District of California, Case No. 3:14-cv-00722-SI (January 20, 2016).

Deposition of Paul A. Gompers in In Re Symbol Technologies, Inc. Securities Litigation, on behalf of Symbol Technologies, Inc. and the individual defendants, United States District Court for the Eastern District of New York, Civil Action No. 05-CV-3923-DRH (January 27, 2016).

Deposition of Paul A. Gompers in In Re Amgen, Inc. Securities Litigation, on behalf of Amgen, Inc., United States District Court for the Central District of California, Western Division, Case No. CV 07-2536 PSG (PLAx) (February 25, 2016).

Deposition of Paul A. Gompers in In Re Comverge, Inc. Shareholders Litigation, on behalf of the Comverge directors, Court of Chancery of the State of Delaware, Consolidated C.A. No. 7368-VCP (March 24, 2016).

Deposition of Paul A. Gompers in Musashi, L.L.C. and W.R. Huff Asset Management Co., L.L.C. v. Virgin Media Inc., on behalf of Musashi, L.L.C. and W.R. Huff Asset Management Co., L.L.C., Superior Court of New Jersey, Law Division: Morris County, Civil Action No. MRS-L-734-13 (June 1, 2016).

Deposition of Paul A. Gompers in Spin Master Ltd. v. Bureau Veritas Consumer Products Services, Inc. and Eurofins Product safety Labs, Inc., on behalf of Bureau Veritas Consumer Products Services, Inc., United States District Court for the Western District of New York, Civil Action No. 08 CV 0923 (August 8, 2016).

Arbitration Testimony of Paul A. Gompers in Todd M. Rainville v. Symmetric Capital, LLC, et al., on behalf of Symmetric Capital, LLC, et al., American Arbitration Association, Arbitration No. 01-15-003-8498 (August 2016).

Appendix A

Paul A. Gompers

Expert Depositions and Testimony for Prior Four Years

Deposition of Paul A. Gompers in Alan Willis, Individually and on Behalf of All Others Similarly Situated v. Big Lots, Inc., et al., on behalf of Big Lots, Inc. and the individual defendants, United States District Court for the Southern District of Ohio, Eastern Division, Case No. 2:12-cv-00604-MHW-NMK (August 25, 2016).

Arbitration Testimony of Paul A. Gompers in Michael Christopher v. ArcLight Capital Holdings, LLC, et al., on behalf of Michael Christopher, Judicial Arbitration and Mediation Services, Arbitration No. 1400015869 (October 6, 2016).

Deposition of Paul A. Gompers in ITW Global Investments Inc. v. American Industrial Partners Capital Fund IV, L.P., et al., on behalf of ITW Global Investments Inc., Superior Court of the State of Delaware in and for New Castle County, C.A. No. N14C-10-236 (JRJ) (November 3, 2016).

Deposition of Paul A. Gompers in Keith Thomas, Richard Hayes, Herb Smith, and Oklahoma Police Pension & Retirement System v. Magnachip Semiconductor Corp., Sang Park, Tae Young Hwang, Margaret Sakai, R. Douglas Norby, Ilbok Lee, Nader Tavakoli, Randal Klein, Michel Elkins, Avenue Capital Management II, L.P., Barclays Capital Inc., Deutsche Bank Securities Inc., Citigroup Global Markets Inc., UBS Securities LLC, and Needham and Company, LLC, on behalf of Avenue Capital Management II, L.P., United States District Court for the Northern District of California, Case No. 3:14-cv-01160-JST (November 16, 2016).

Deposition of Paul A. Gompers in Dr. Joseph F. Kasper v. AAC Holdings, Inc. et al., on behalf of AAC Holdings, Inc. and the individual defendants, United States District Court for the Middle District of Tennessee, Case No. 3:15-cv-00923 (January 23, 2017).

Deposition of Paul A. Gompers in In re Facebook, Inc., IPO Securities and Derivative Litigation, on behalf of Facebook, Inc. and its officers and directors named in the suit, United States District Court for the Southern District of New York, MDL No. 12-2389 (March 28, 2017).

Deposition of Paul A. Gompers in Louisiana Municipal Police Employees' Retirement System, et al. v. Green Mountain Coffee Roasters, Inc. et al., on behalf of Green Mountain Coffee Roasters, Inc., United States District Court for the District of Vermont, Civil Action No. 2011-CV-00289 (August 3, 2017).

Deposition of Paul A. Gompers in Ohio Public Employees Retirement System, On Behalf of Itself and All Others Similarly Situated v. Federal Home Loan Mortgage Corporation a/k/a Freddie Mac, et al., on behalf of Federal Home Loan Mortgage Corporation, United States District Court for the Northern District of Ohio, Eastern Division, Civil Action No. 4:08-CV-00160 (September 15, 2017).

Deposition of Paul A. Gompers in Hudson Bay Master Fund Ltd. v. Patriot National, Inc. and Steven M. Mariano and CVI Investments, Inc. v. Patriot National, Inc., on behalf of Patriot National, Inc. and Steven M. Mariano, United States District Court for the Southern District of New York, Case Nos. 16-cv-2767 (GBD) (RLE) and 16-cv-2787 (GBD) (RLE) (October 4, 2017).

Appendix A

Paul A. Gompers

Expert Depositions and Testimony for Prior Four Years

Testimony of Paul A. Gompers in Musashi, L.L.C. and W.R. Huff Asset Management Co., L.L.C. v. Virgin Media Inc., on behalf of Musashi, L.L.C. and W.R. Huff Asset Management Co., L.L.C., Superior Court of New Jersey, Law Division: Morris County, Civil Action No. MRS-L-734-13 (October 18, 2017).

Deposition of Paul A. Gompers in Winson Tang v. Lindsay Rosenwald, Michael Weiss, Opus Point Partners, LLC, Mustang Bio, Inc. (aka Mustang Therapeutics, Inc.), City of Hope, and Fortress Biotech, Inc. (f/k/a Coronado Biosciences, Inc.), on behalf of Opus Point Partners, LLC, Mustang Therapeutics, Inc., Fortress Biotech, Inc., Lindsay Rosenwald, and Michael Weiss, Superior Court of the State of California, County of Los Angeles, Case No. BC 607346 (October 23, 2017).

Deposition of Paul A. Gompers in EWC Holdings, Inc. v. Princeton Ventures II, LLC and Brazos/EWC, LLC, on behalf of EWC Holdings, Inc., Court of Chancery of the State of Delaware, C.A. No. 12519-VCL (November 7, 2017).

Deposition of Paul A. Gompers in Securities and Exchange Commission v. AVEO Pharmaceuticals, Inc., Tuan Ha-Ngoc, David Johnston, and William Slichenmeyer, on behalf of the individual defendants, United States District Court for the District of Massachusetts, Case No. 1:16-cv-10607-NMG (December 13, 2017).

Deposition of Paul A. Gompers in Ralph S. Janvey, In His Capacity as Court-Appointed Receiver for the Stanford Receivership Estate, and the Official Stanford Investors Committee v. Proskauer Rose, LLP, Chadbourne & Parke, LLP, and Thomas V. Sjoblom, on behalf of Proskauer Rose, LLP and Thomas V. Sjoblom, United States District Court for the Northern District of Texas, Dallas Division, Civil Action No. 3:13-cv-00477-N (January 22, 2018).

Arbitration Testimony of Paul A. Gompers in Credit Agricole Corporate and Investment Bank (f/k/a Calyon Bank New York Branch), et al. v. Black Diamond Capital Management LLC, et al., on behalf of Black Diamond Capital Management LLC, BDC Finance LLC, and Black Diamond CLO 2006-1, American Arbitration Association, Arbitration No. 01-17-0007-1196 (February 6, 2018).

Deposition of Paul A. Gompers in Michael J. Angley, Individually and on Behalf of All Others Similarly Situated v. UTi Worldwide Inc., et al., on behalf of UTi Worldwide Inc. and the individual defendants, United States District Court for the Central District of California, Western Division, Case No. 2:14-cv-02066-CBM-E (February 27, 2018).

Deposition of Paul A. Gompers in Gary Koopmann, Timothy Kidd, and Victor Pirnik, Individually and on Behalf of All Others Similarly Situated v. Fiat Chrysler Automobiles N.V., et al., on behalf of Fiat Chrysler Automobiles N.V., United States District Court for the Southern District of New York, Case No. 1:15-cv-07199-JMF (March 5, 2018).

Deposition of Paul A. Gompers in Kortright Capital Partners LP, et al. v. Investcorp Investment Advisers Limited, on behalf of Kortright Capital Partners LP, Matthew Taylor, and Ty Popplewell, United States District Court for the Southern District of New York, Case No. 16-cv-7619 (March 27, 2018).

Appendix B

List of Documents Considered

BOOKS

- David H. Kaye and David A. Freedman, “Reference Guide on Statistics” in *Reference Manual on Scientific Evidence*, Third Edition (The National Academies Press, 2011).

DEPOSITIONS

- Deposition of Paul Alan Gompers, Ph.D., March 5, 2018.

EXPERT REPORTS AND EXHIBITS

- Expert Report of Zachary Nye, Ph.D., filed on December 21, 2017.
- Backup Materials for the Expert Report of Zachary Nye, Ph.D., December 21, 2017.
- Expert Report of Paul A. Gompers, Ph.D., filed on February 13, 2018.
- Backup Materials for the Expert Report of Paul A. Gompers, Ph.D., filed on February 13, 2018.
- Expert Rebuttal Report of Zachary Nye, Ph.D., filed on March 13, 2018.

LEGAL DOCUMENTS

- Fourth Amended Complaint for Violations of the Federal Securities Laws, *Gary Koopmann, Timothy Kidd and Victor Pirnik, Individually and on Behalf of All Others Similarly Situated v. Fiat Chrysler Automobiles N.V., FCA US LLC, Sergio Marchionne, Scott Kunselman, Michael Dahl, Steve Mazure, and Robert E. Lee*, Civ. Action No:15-cv-07199-JMF (S.D.N.Y. August 24, 2017).